



THE CITY OF SAN DIEGO  
**MANAGER'S REPORT**

DATE ISSUED: May 11, 2001

REPORT NO. 01-094

ATTENTION: Honorable Mayor and City Council  
Docket of May 15, 2001

SUBJECT: Power (Battery) Back-Up Systems at Top 115 Priority Intersections

REFERENCE: None.

SUMMARY

Issue - Should the City Council approve the transfer and expenditure of \$690,000 from CIP 52-330.0, Sorrento Valley Road/Industrial Ct. to Carmel Valley Rd., to Street Division Operating Fund 10440, Dept. 940, Org. 2604, for the purpose of installing power (battery) back-up systems at 115 signalized intersections?

Manager's Recommendation - Approve the transfer and expenditure.

Other Recommendation - None.

Fiscal Impact - Due to the urgency of the request to initiate this project, the necessary funding of \$690,000 will temporarily be moved from CIP 52-330.0 because no unallocated funds are available. It is anticipated that the appropriation will be returned to the project as soon as possible with either future revenues generated over budgeted amounts, or future expenditure savings.

BACKGROUND

The City of San Diego has 1,410 signalized intersections. Due to the rolling blackouts, the signalized intersections are turned into four way stops. This abrupt change in the function of the intersection is resulting in some motorist confusion and increases the potential for accidents. The installation of a power (battery) back-up system at an intersection will allow the continued normal operation in the event of any power loss. This project will provide the installation of battery back-up units at the 115 highest priority intersections. The first 39 intersections, located adjacent to freeways, are based on avoiding traffic back-up on the freeways. This is to prevent an

accident from occurring by a vehicle traveling at a high rate of speed approaching an intersection that has lost power. The next 65 signals are at railroad/trolley crossings with railroad preemption. This will prevent traffic from interfering with the crossings, getting stuck on the tracks, or back-ups. The remaining 11 intersections are based on high volume vehicles and/or pedestrians. Attached is the list of these intersections.

The selection of these 115 intersections is based on fiscal constraints. After these 115 intersections, other intersections can continue to be prioritized based on high volume prime arterial streets, high volume major streets, other major streets, etc. The City could continue the installation of the power (battery) back-up systems on a multi-year basis to gradually retrofit all 1,410 signalized intersections. In addition, the City can institute a requirement that all new traffic signals include battery back-up. After this project, we will evaluate and continue to seek solutions in addressing power outages at intersections; however, additional future installations will be based on fiscal constraints and the ongoing energy situation.

## CONCLUSION

The rolling blackouts are expected to continue indefinitely and may even increase in frequency. Not enough notice is given to allow City staff to provide temporary stop signs or other traffic control measures at all of the impacted intersections. The power back-up systems will allow for normal traffic operation and minimize the potential of an accident due to a power outage.

## ALTERNATIVE

The 115 intersections can be reduced or increased at an average cost of \$6,000 per intersection.

Respectfully submitted,

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D. Cruz Gonzalez  
Director, Transportation

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Approved: George I. Loveland  
Senior Deputy City Manager

LOVELAND/SIERRA/VO

Attachment: 1. List of Intersections Installation of Power (Battery) Back-up Systems

LIST OF INTERSECTIONS  
INSTALLATION OF POWER (BATTERY) BACK-UP SYSTEMS

	<b><u>Corridor</u></b>	<b><u>Intersection</u></b>
1.	I -15	Rancho Bernardo Road @ West Bernardo Drive
2.		Rancho Bernardo Road @ Bernardo Center Drive
3.		Mira Mesa Boulevard @ Westview Parkway
4.		Carmel Mountain Road @ Penasquitos Drive
5.		Mira Mesa Boulevard @ Scripps Ranch Boulevard
6.		Carroll Canyon Road @ Business Park Avenue
7.		Carroll Canyon Road @ Maya Linda Road
8.		Miramar Road @ Kearny Mesa Road
9.		Aero Dr @ Murphy Canyon Road
10.	SR -163	Clairemont Mesa Boulevard @ Kearny Mesa Road
11.		Clairemont Mesa Boulevard @ Kearny Villa Road
12.		Clairemont Mesa Boulevard @ Murphy Canyon Road
13.		Mesa College Dr @ Health Center Drive
14.		Friars Road @ Frazee Road
15.		Friars Road @ Avenida De Las Tiendas
16.		9th Avenue @ Ash Street
17.		10th Avenue @ A Street
18.		10th Avenue @ B Street
19.	I - 5	1st Avenue @ Elm Street
20.		6th Avenue @ Elm Street
21.		28th Street @ Boston Avenue
22.		Carmel Mountain Road @ El Camino Real
23.		Carmel Valley Road @ Sorrento Valley Road
24.		Del Mar Heights Road @ High Bluff Road
25.		Del Mar Heights Road @ El Camino Real
26.		Garnet Avenue @ Bluffside Avenue
27.		Garnet Avenue @ Damon Avenue
28.	I - 8	Garnet Avenue @ West Mission Bay Drive
29.		La Jolla Village Drive @ Villa La Jolla
30.		Via de la Valle @ Flower Hill Mall
31.		San Andres Drive @ Via de la Valle
32.		Camino Del Rio North @ Mission Center Drive
33.		College Avenue @ Canyon Crest Drive
34.		Fairmount Avenue @ Mission Gorge Road

	<b><u>Corridor</u></b>	<b><u>Intersection</u></b>
35.	I - 805	El Cajon Boulevard @ Illinois Street 36.
		El Cajon Boulevard @ 33rd Street
37.		47th Street @ Imperial Street
38.	SR-94	16th Street @ F Street
39.		College Avenue @ Judy McCarty Way
40.		C Street @ India Street
41.		C Street @ Front Street
42.		C Street @ 1st Avenue
43.		C Street @ 2 <sup>nd</sup> Avenue
44.		C Street @ 3 <sup>rd</sup> Avenue
45.		C Street @ 4 <sup>th</sup> Avenue
46.		C Street @ 5 <sup>th</sup> Avenue
47.		C Street @ 6 <sup>th</sup> Avenue
48.		C Street @ 7 <sup>th</sup> Avenue
49.		C Street @ 8 <sup>th</sup> Avenue
50.		C Street @ 9 <sup>th</sup> Avenue
51.		C Street @ 10 <sup>th</sup> Avenue
52.		C Street @ 11 <sup>th</sup> Avenue
53.		C Street @ 12 <sup>th</sup> Avenue
54.		12th Avenue @ Broadway
55.		12 <sup>th</sup> Avenue @ E Street
56.		12 <sup>th</sup> Avenue @ F Street
57.		12 <sup>th</sup> Avenue @ G Street
58.		12 <sup>th</sup> Avenue @ Market Street
59.		Commercial Street @ 16th Street
60.		Commercial Street @ 19th Street
61.		Commercial Street @ 25th Street
62.		Commercial Street @ 28th Street
63.		Commercial Street @ 30th Street
64.		Euclid Avenue @ Market Street
65.		Euclid Avenue @ Naranja
66.		Kettner Boulevard @ Broadway
67.		Kettner Boulevard @ G Street
68.		Kettner Boulevard @ Laurel Street
69.		Kettner Boulevard @ Grape Street
70.		Kettner Boulevard @ Hawthorn Street
71.		Kettner Boulevard @ Ash Street
72.		Harbor Drive @ Market Street
73.		Harbor Drive @ Front Street
74.		Harbor Drive @ 1st Avenue
75.		Harbor Drive @ 5th Avenue

- 76. Harbor Drive @ 8th Avenue
- 77. Harbor Drive @ Crosby Street

**Corridor**

**Intersection**

- 78. Harbor Drive @ Sampson Street
- 79. Harbor Drive @ 28th Street
- 80. Harbor Drive @ 32nd Street
- 81. Imperial Avenue @ 12th Street
- 82. Imperial Avenue @ 60th Street
- 83. Imperial Avenue @ 62nd Street
- 84. Imperial Avenue @ 63rd Street
- 85. Imperial Avenue @ 65th Street
- 86. Imperial Avenue @ 69th Street
- 87. Imperial Avenue @ Merlin Street
- 88. Pacific Highway @ Ash Street
- 89. Pacific Highway @ Broadway
- 90. Pacific Highway @ Cedar Street
- 91. Pacific Highway @ Grape Street
- 92. Pacific Highway @ Hawthorn Street
- 93. Pacific Highway @ Sassafras Street
- 94. Pacific Highway @ Laurel Street
- 95. Pacific Highway @ Washington Street
- 96. Pacific Highway @ Rosecrans
- 97. Washington Street @ Hancock Street
- 98. Rosecrans @ Taylor Street
- 99. Sorrento Valley Boulevard @ Sorrento Valley Road
- 100. Hazard Center Drive @ Hazard Driveway West
- 101. Palm Avenue @ Hollister Street
- 102. Palm Avenue @ Harris Avenue
- 103. East San Ysidro Boulevard @ Camino De La Plaza
- 104. East San Ysidro Boulevard @ I-5/Jack in the Box Driveway
- 105. College Avenue @ El Cajon Boulevard
- 106. College Avenue @ Montezuma Road
- 107. Genesee Avenue @ North Torrey Pines
- 108. Governor Drive @ Genesee Avenue
- 109. La Jolla Village Drive @ Genesee Avenue
- 110. Mira Mesa Boulevard @ Black Mountain Road
- 111. Mira Mesa Boulevard @ Scranton Road
- 112. Scranton Road @ Morehouse Drive
- 113. Miramar Road @ Kearny Villa Road
- 114. Park Boulevard @ El Cajon Boulevard
- 115. Park Boulevard @ University Avenue

